

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
3 February 2005 (03.02.2005)

PCT

(10) International Publication Number  
**WO 2005/010346 A1**

(51) International Patent Classification<sup>7</sup>:  
59/46, 59/36, 55/02, 61/16

**F02M 57/02,**

(74) Agents: BAIR, Joel, E. et al.; Mc Garry Bair PC, 171  
Monroe Avenue, N.W., Suite 600, Grand Rapids, MI 49503  
(US).

(21) International Application Number:

PCT/US2003/020641

(22) International Filing Date: 30 June 2003 (30.06.2003)

(25) Filing Language: English

(26) Publication Language: English

(71) Applicant (for all designated States except US): ROBERT  
BOSCH GMBH [DE/DE]; Postfach 30 02 20, 70442  
Stuttgart (DE).

(72) Inventor; and

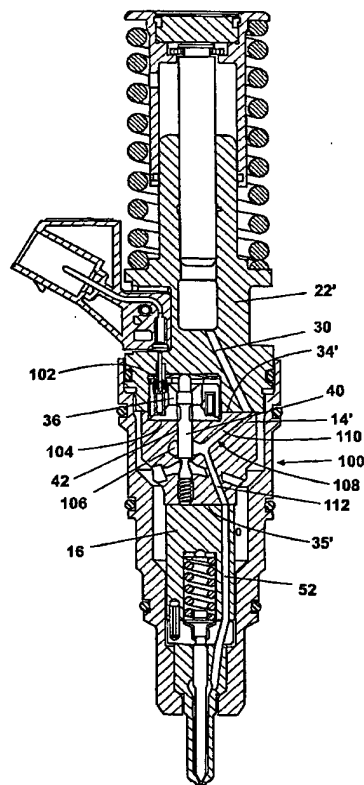
(75) Inventor/Applicant (for US only): SEELBACH, Klaus  
[DE/US]; 2639 Winesap Drive NE, Grand Rapids, MI  
49525 (US).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,  
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,  
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,  
MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE,  
SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,  
VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM,  
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),  
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,  
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,  
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: CONDUIT ARRANGEMENT IN A CONTROL VALVE MODULE FOR A FUEL INJECTOR ASSEMBLY



(57) Abstract: A control valve module (14') for a  
fuel injector assembly (10) has a conduit arrangement  
where a high-pressure passage (108) has a first  
portion (110) extending linearly between an annulus  
(106) surrounding the control valve cylinder (42)  
and an upper edge (34), and a second portion (112)  
extending linearly between the annulus (106) and a  
lower edge (35').



**Published:**

— with international search report

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*